

**APPENDIX A - CLAIM AMENDMENTS**  
**INCLUDING NOTATIONS TO INDICATE CHANGES MADE**

Serial No.: 09/814,257

Docket No.: 180.0003 0102

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Amendments to the following are indicated by underlining what has been added and bracketing what has been deleted. Additionally, all amendments have been shaded.

**In the Claims**

12. **(Amended)** A primer selected from the group of:

5' - CGT CGC TCA CCA TAT CTC CC - 3' (SEQ ID NO:34);

5' - CCT CTC GTG CTT TAG ACC CG - 3' (SEQ ID NO:35); and **full-length**  
complements thereof.

13. **(Amended)** A primer selected from the group of:

5' - CGC TGG GAA ACC TAT TCG G - 3' (SEQ ID NO:36);

5' - CTG CCA TCC AGT TTC TTC GGG - 3' (SEQ ID NO:37); and **full-length**  
complements thereof.

14. **(Amended)** A primer selected from the group of:

5' - GGT GGC ATT GAC AAA TTC TGG - 3' (SEQ ID NO:38);

5' - CCC ACC ATG CGA CAC CAG - 3' (SEQ ID NO:39); and **full-length** complements thereof.

15. **(Amended)** A primer selected from the group of:

5' - TGT GCA ACG CAA ATG GCA C - 3' (SEQ ID NO:40);

5' - CGA CCC CAA GTT TCC TGT AAG TG - 3' (SEQ ID NO:41); and **full-length**  
complements thereof.

**Appendix A**

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16. (**Amended**) A primer selected from the group of:

5' - AGG CAC GAT AGT TGT GGC AGA C - 3' (SEQ ID NO:42);

5' - CAC TCA ACC CAT CCT ACC CAC C - 3' (SEQ ID NO:43); and full-length

complements thereof.

17. A method for identifying a beta-lactamase in a clinical sample, the method comprising:  
providing a pair of oligonucleotide primers specific for nucleic acid  
characteristic of the OXA family of beta-lactamase enzymes, wherein one primer of the pair is  
complementary to at least a portion of the beta-lactamase nucleic acid in the sense strand and the  
other primer of each pair is complementary to at least a portion of the beta-lactamase nucleic  
acid in the antisense strand;

annealing the primers to the beta-lactamase nucleic acid;

simultaneously extending the annealed primers from a 3' terminus of each  
primer to synthesize an extension product that is complementary to the nucleic acid strands  
annealed to each primer wherein each extension product after separation from the beta-lactamase  
nucleic acid serves as a template for the synthesis of an extension product for the other primer of  
each pair;

separating the amplified products; and

analyzing the separated amplified products for a region characteristic of the  
beta-lactamase.

39. The method of claim 17 wherein the primers are specific for nucleic acid characteristic of  
the OXA-9 beta-lactamase enzyme.

40. (**Amended**) The method of claim 39 wherein the primers are selected from the group of:

5' - CGT CGC TCA CCA TAT CTC CC - 3' (SEQ ID NO:34);

5' - CCT CTC GTG CTT TAG ACC CG - 3' (SEQ ID NO:35); and full-length

complements thereof.

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41. The method of claim 17 wherein the primers are specific for nucleic acid characteristic of the OXA-12 beta-lactamase enzyme.
42. **(Amended)** The method of claim 41 wherein the primers are selected from the group of:  
5' - CGC TGG GAA ACC TAT TCG G - 3' (SEQ ID NO:36);  
5' - CTG CCA TCC AGT TTC TTC GGG - 3' (SEQ ID NO:37); and **full-length**  
complements thereof.
43. The method of claim 17 wherein the primers are specific for nucleic acid characteristic of the OXA-5, 6, 7, 10, 11, 13, and 14 beta-lactamase enzymes.
44. **(Amended)** The method of claim 43 wherein the primers are selected from the group of:  
5' - GGT GGC ATT GAC AAA TTC TGG - 3' (SEQ ID NO:38);  
5' - CCC ACC ATG CGA CAC CAG - 3' (SEQ ID NO:39); and **full-length** complements thereof.
45. The method of claim 17 wherein the primers are specific for nucleic acid characteristic of the OXA-1 beta-lactamase enzyme.
46. **(Amended)** The method of claim 45 wherein the primers are selected from the group of:  
5' - TGT GCA ACG CAA ATG GCA C - 3' (SEQ ID NO:40);  
5' - CGA CCC CAA GTT TCC TGT AAG TG - 3' (SEQ ID NO:41); and **full-length**  
complements thereof.
47. The method of claim 17 wherein the primers are specific for nucleic acid characteristic of the OXA-2, 3, and 15 beta-lactamase enzymes.

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48. (**Amended**) The method of claim 47 wherein the primers are selected from the group of:

5' - AGG CAC GAT AGT TGT GGC AGA C - 3' (SEQ ID NO:42);

5' - CAC TCA ACC CAT CCT ACC CAC C - 3' (SEQ ID NO:43); and full-length

complements thereof.

49. A diagnostic kit for detecting an OXA family beta-lactamase which comprises packaging, containing, separately packaged:

(a) at least one primer pair capable of hybridizing to beta-lactamase nucleic acid of interest;

(b) a positive and negative control; and

(c) a protocol for identification of the beta-lactamase nucleic acid of interest.

51. (**Amended**) The diagnostic kit of claim 49 wherein the primers are selected from the group consisting of:

5' - CGT CGC TCA CCA TAT CTC CC - 3' (SEQ ID NO:34);

5' - CCT CTC GTG CTT TAG ACC CG - 3' (SEQ ID NO:35);

5' - CGC TGG GAA ACC TAT TCG G - 3' (SEQ ID NO:36);

5' - CTG CCA TCC AGT TTC TTC GGG - 3' (SEQ ID NO:37);

5' - GGT GGC ATT GAC AAA TTC TGG - 3' (SEQ ID NO:38);

5' - CCC ACC ATG CGA CAC CAG - 3' (SEQ ID NO:39);

5' - TGT GCA ACG CAA ATG GCA C - 3' (SEQ ID NO:40);

5' - CGA CCC CAA GTT TCC TGT AAG TG - 3' (SEQ ID NO:41);

5' - AGG CAC GAT AGT TGT GGC AGA C - 3' (SEQ ID NO:42);

5' - CAC TCA ACC CAT CCT ACC CAC C - 3' (SEQ ID NO:43); and full-length

complements thereof.